CHAPTER TWO Highways

Performance on highways in Alameda County is tracked in this report in the following ways:

- Level of Service - measures the level of congestion on County freeways and arterial roadways
- Origin and Destination (O&D) Pairs Travel Times – measures travel times between destinations
- Vehicle Hours of Delay – measures amount of time travelers are delayed in traffic
- Road Maintenance – tracks quality of pavement throughout the County
- Accidents – the number of accidents along County freeways

Level of Service (LOS) and Origin and Destination (O&D) Pairs Travel Times are measured by Alameda County CMA in even-numbered years. The CMP roadways were most recently monitored in spring 2008. Vehicle hours of delay and road maintenance are measured by MTC yearly. Caltrans tracks the number of accidents yearly.

LEVEL OF SERVICE[1]

Biennially, the CMA monitors the level of service (LOS) on all freeways and arterial roadways designated as the Congestion Management Program (CMP) network. The CMA monitored LOS in 2008.

Based on travel speeds, LOS is categorized into six levels: A through F. LOS A represents no congestion and LOS F represents the most congestion (see Appendix C for more details on LOS). As shown in Figure 1, the overall 2008 level of service on freeways has improved and arterials have remained steady since 2006. The percentage of freeways with LOS A increased significantly since 2006, with a corresponding decrease in LOS D, E and F during that time. Arterial performance shows an increase in LOS A and decreases in LOS D and E compared to 2006.

A summary of the results of the 2008 LOS Monitoring Report are included below.

- The percentage of freeways performing at LOS A, increased significantly in 2008, from 25.9 percent to 38.4 percent. 2008 showed the highest rate of freeways performing at LOS A since 2000, which was at the peak of the dot com period. In 2008, the decreased levels of congestion were likely due to the downturn in the economy combined with increased gas prices.

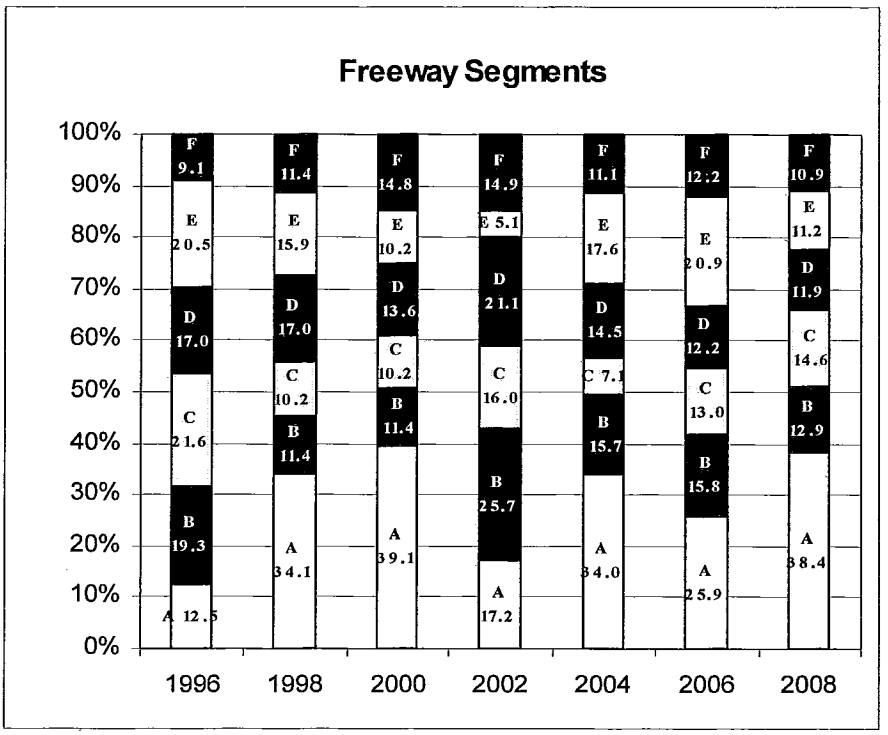
[1] For detailed information see *2008 Level of Service Monitoring for the Alameda County CMP Designated Roadway System.*

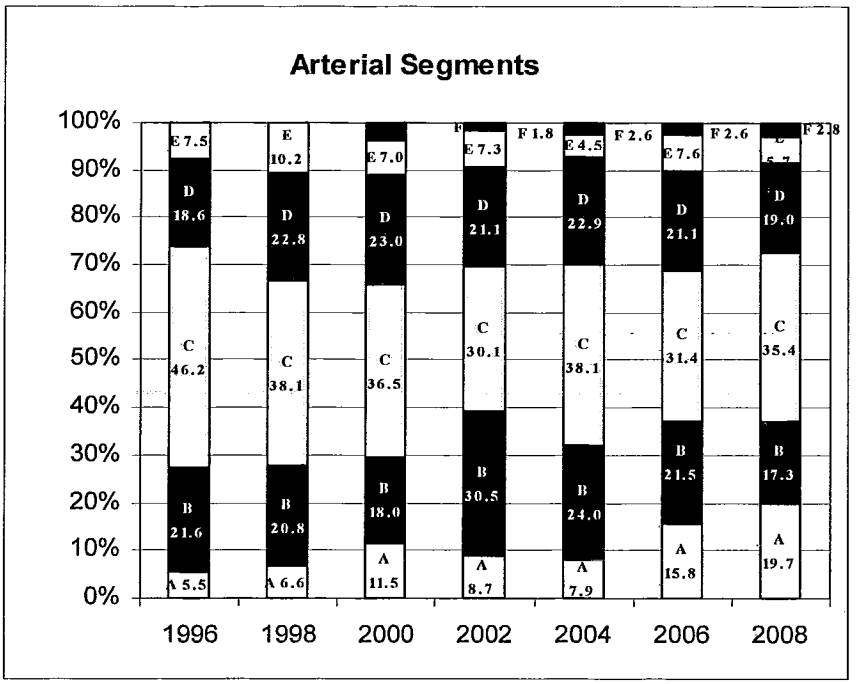
- The percentage of freeways performing at LOS D, E and F, decreased. From 45.3 percent to 34 percent.
- Average speeds in four freeway corridors increased notably in 2008 compared to 2006, while one freeway corridor experienced a significant drop in speed. The freeways that experienced a significant increase in speed are:
  - I-80 westbound from Central to Tollgate: The average speed increased from 27.7 miles per hour (mph) (LOS (Level of Service) F) to 36.2 miles per hour (LOS E).
  - I-880 southbound from I-980 to Dixon Landing: The average speed increased from 37.1 mph (LOS E) in 2006 to 47.6 mph (LOS D) in 2008.
  - I-580 eastbound from I-80/I-580 Split to I-238: The average speed increased from 39.3 mph in 2006 with LOS E to 47.0 mph, at LOS D, in 2008.
  - SR-13 northbound from Mountain to Hiller: The average speeds of 38.8 mph in 2006 with LOS E. increased to 51.0 mph, at LOS C, in 2008.
  - On SR 84 Niles Canyon westbound between Isabel and SR 238 average speeds have increased from 35.4 mph in 2006 to 40.9 mph, or LOS A, in 2008.

- Conversely, average speeds decreased as noted below:
  - I-680 northbound from Scott Creek to Alcosta: Average speeds have degraded from 52.9 mph in 2006 to 43.4 mph in 2008, a drop in LOS from C to D.
  - SR 238 Mission northbound from Jackson to I-680 northbound: average speeds decreased from 27.7 mph in 2006 to 23.1 mph, or LOS C, in 2008.
  - Decoto Road/Dumbarton Bridge eastbound from the County line to SR 238 where speeds decreased 30.3 mph in 2006 to 25.9 mph, or LOS C, in 2008.

- Other corridors either show modest increases or decreases in speeds with the exception of SR 24 westbound from Fish Ranch to I-580, a reverse commute direction. This corridor has stayed almost at the same speed ranging between 58.4 and 58.8 mph, since 2004.

Figure 1—Level of Service on Freeways and Arterials





Source: Alameda County CMA *LOS Monitoring Reports*, 1996-2008

Note: Level of Service on all CMP Freeways and Arterial segments between 4 to 6 PM on the average weekday

Average Speed/Travel Time

Average highway speed is the average vehicular travel speed over specified segments, measured in each lane during the peak period. The CMA collects data biennially for the afternoon and morning peak periods. Table 2 indicates that travel time during the afternoon peak, as measured by speed, remained relatively stable over the last 10 years while speeds on both freeways and arterials increased between 2006 and 2008. Table 3 shows that travel time has steadily increased on freeways during the morning peak over the past decade. This is part of a trend for the average travel speed on the freeways to increase since 2002 while on arterials it has fluctuated within the same general range during that time. The 2008 travel time surveys showed 2.6 miles per hour increase in average speeds on the freeway system and 1.1 miles per hour on the arterials during the p.m. peak period. The a.m. peak period experienced an increase of 2.4 mph on freeways and 0.6 mph on arterials. The freeway corridors that experienced degradation in service levels were mostly due to construction activity occurring in the county. Also, in some instances, as a result of splitting longer segments into shorter ones, consistent with the adopted 2007 Congestion Management Program (CMP), some shorter segments that had been part of an average longer segment, have been identified as having decreased travel times.

Table 2—Average Vehicle Speed in the Afternoon Peak (in miles per hour)

ROAD TYPE	CENTER-LINE MILES	1998	2000	2002	2004	2006	2008
Arterials *	96.2	22.63	23.64	23.27	24.32	24.11	25.21
Freeways **	134.3	51.47	51.02	51.21	49.86	47.83	50.43

Source: Alameda County CMA, LOS Monitoring Reports, 1996-2008

Notes:

* Includes local arterials and conventional state highways

** Includes Interstate and other freeways

Table 3—Average Vehicle Speed on Freeways in the Morning Peak (in miles per hour)

1996	1998	2000	2002	2004	2006	2008
44.1	42.4	38.1	42.03	46.51	50.0	52.4

Note:

- The length of the number of segments monitored increased from 55 miles to 90 miles in 2002 to 232 miles in 2006.
- The speed data for 2006 shown in Table 3 is not comparable with previous years because until 2004 only a few selected roadway segments --90 miles in length--mostly peak direction, were monitored. However, in 2006 all of the CMP roadways (232 miles) were monitored. The increased average speed in 2006 is likely due to averaging the peak and non-peak direction speeds.

Table 4 compares vehicle speeds for selected segments during the morning peak. Notable observations found in the data include:

- Approximately half of the segments monitored show increases in speed in 2008 compared to 2006. This is likely due to the economic downturn.
- On I-880, the segment that experienced the greatest decline in speed occurred in the Vargas to SR-238 segment, which decreased from 57.7 miles per hour to 38.1 miles per hour.
- The greatest increase in speed was from SR-262 to Dixon Landing Road, which increased from 20.3 to 57.1 miles per hour, a total of 36.8 miles per hour.

Table 4—Comparison of Speeds in the Morning Peak (in miles per hour)

SEGMENT	1998	2000	2002	2004	2006	2008
I-880 Southbound						
· Marina to A St.	57.4	38.2	50.1	36.5	27.3	
· Split to 2 new segments						33.9
o Marina to 238 WB						
o I-238 to A Street						24.1
· A St. to SR-92	58.1	15.9	21.9	40.6	32.0	29.4
· SR- 92 to Tennyson	53.6	31.3	42.5	48.6	38.3	30.3
· Tennyson to Alvarado-Niles	36.3	28.8	46.2	49.1	43.8	38.8
· SR-262 to Dixon Landing	9.6	11.4	N/A	21.4	20.3	57.1
I-880 Northbound						
· Alvarado-Niles to Tennyson	42.3	32.9	31.3	33.7	24.4	26.2
· Tennyson to SR-92	49.6	45.9	41.4	53.3	41.5	45.3
· SR-92 to A St.	55.3	36.3	44.8	42.5	45.7	52.9
· A St. to Marina	52.7	57.3	55.8	44.9	50.7	59.0
I-238 Westbound						
· I-580 to I-880	20.6	18.0	22.5	20.2	15.4	
I-680 Southbound *						
· Alcosta to I-580	65.3	57.7	63.0	69.0	64.3	67.4
· I-580 to Bernal*	67.2	64.6	63.5	67.1	54.7	*
o I-580 to Stoneridge (new)						59.1
· Bernal to Niles (SR84)*	40.3	56.8	46.2	66.0	55.6	*
o Bernal to Sunol Blvd (new)						41.3
o Sunol Blvd to SR84 (new)						51.0
· Niles to Mission*	12.9	17.6	28.2	61.0	57.7	*
o Niles to Andrade						46.9
o Andrade to Sheridon						55.7
o Sheridon to Vargas						41.6
o Vargas to SR238						38.1

I-580 Westbound						
▪ Portola to Tassajara*					30.8	*
o Portola to SR84						29.4
o SR84 to El Charro	43.5	41.9	32.4	27.5		40.9
o El Charro to Tassajara						52.8
▪ Tassajara to I-680*	60.6	63.8	44.0	50.6	46.1	54.3*

Source: Alameda County CMA, *LOS Monitoring Report*, 1996-2008

Notes: *routes that were not studied in 2008 because they were broken into smaller segments.

Origin/Destination Pairs

Since 1996, the ACCMA has compared travel times for auto and transit for ten origin/destination pairs within Alameda County. The results, shown in Table 5, indicate that overall auto has reduced travel time and transit has increased travel time compared to 2006. In general, auto travel time shows more improvement than transit travel since 2006. Travel times range between 2 to over 5.5 times longer for transit than automobile travel for the 10 pairs studied. The improvements in auto travel time in nine out of 10 pairs can be attributed to the economic downturn and record high gas prices.

Alameda County also compared travel times for bicycles. Similar to previous years, bicycle trips in the north part of the County continue to compete favorably with both auto and transit in 2008.

Table 5—Comparative Travel Times for Origin/Destination Pairs in the Afternoon Peak (minutes)

PAIR	1998	2000	2002	2004	2006	2008
1—Hayward to Thornton Avenue, Newark	Auto—24 Transit—88	Auto—22 Transit—92	Auto—22 Transit—79	Auto—16 Transit—90	Auto—19 Transit—86	Auto—14 Transit—74
2—Chiron Emeryville to Marin Circle, Berkeley	Auto—25 Transit—61 Bicycle—33	Auto—26 Transit—NA Bicycle—30	Auto—25 Transit—56 Bicycle—30	Auto—28 Transit—53 Bicycle—33	Auto—22 Transit—45 Bicycle—30	Auto—22 Transit—70 Bicycle—32
3—CSU, Hayward to Delaware Way, Livermore	Auto—53 Transit—144	Auto—45 Transit—152	Auto—49 Transit—141	Auto—61 Transit—120	Auto—61 Transit—113	Auto—54 Transit—143
4—Downtown Oakland to Chapel Ave., San Leandro	Auto – 35 Transit – 74	Auto – 29 Transit – 64	Auto – 32 Transit – 56	Auto—41 Transit—70	Auto—34 Transit—66	Auto—27 Transit—145
5—NUMMI Plant, Fremont to Hansen and Valley Avenue, Pleasanton	Auto—31 Transit—130	Auto—34 Transit—122	Auto—33 Transit—125	Auto—27 Transit—146	Auto—39 Transit—181	Auto—27 Transit—82
6—Fremont from Thornton Avenue/Fremont Boulevard to Fujitsu (Hitachi) in San Jose	Auto—39 Transit—129	Auto—55 Transit – 104	Auto—49 Transit—118	Auto—30 Transit—94	Auto—33 Transit—111	Auto—23 Transit—111

PAIR	1998	2000	2002	2004	2006	2008
7—Fremont to San Jose HOV Lane (future Transit Service to be added when facilities are in place)	NA	Auto—35 Transit—NA	Auto—34 Transit—NA	Auto—27 Transit—NA	Auto—25 Transit—NA	Auto—23 Transit—NA
8—Oakland, from Federal Building. to Hansen and Valley Avenue in Pleasanton	Auto— 58 Transit—81	Auto—60 Transit—96	Auto—60 Transit—70	Auto—45 Transit—77	Auto—57 Transit—75	Auto—41 Transit—107
9—Fremont, Washington Hospital to Searidge in Alameda	Auto—50 Transit—86	Auto—57 Transit—74	Auto—53 Transit—70	Auto—64 Transit—123	Auto—52 Transit—102	Auto—43 Transit—94
10—Alameda Naval Air Station to College Ave. in Oakland	Auto—21 Transit—51	Auto—17 Transit—47	Auto—21 Transit—45	Auto—22 Transit—45	Auto—21 Transit—43	Auto—22 Transit—51

Source: Alameda County CMA, *LOS Monitoring Reports*, 1996-2008

BICYCLE COUNTS

For the fifth time, bicycle count data is included in the LOS Monitoring Report. Since 2002, bicycle counts have been collected by the local jurisdictions at twelve (12) major intersections across the County for the LOS Monitoring Study. Counts were collected at the same locations in 2008. In 2008, eight of the 12 intersections showed an increase in bike usage and 4 showed a decrease. The highest volume increase was at Milvia Street and Hearst Avenue in Berkeley with 82 more bicycles than 2006. The highest decrease in bike usage was in Fremont at Paseo Padre Parkway and Mowry Avenue where the bike counts decreased by 27% from 22 in 2006 bicycles to 16 in 2008 or 6 bicycles.

DELAY/DURATION OF CONGESTION

Since 2004, Metropolitan Transportation Commission has taken the responsibility for annually collecting the information on travel time for freeways in Alameda County and the Bay Area. Previously Caltrans collected that data. The data is collected to identify location of congestion, time of day that congestion occurs, and length of congestion (duration). The number of vehicle hours of delay (VHD) in comparison to previous years indicates whether congestion is increasing or decreasing.

Vehicle Hours of Delay (VHD)

Table 6, Total Weekday Delay on Freeways, identifies the VHD on all Alameda County freeway facilities between 1996 and 2007. In 2007, congestion in Alameda County continued to account for nearly 40% of total congestion in the Bay Area, which is more than double that of the congestion in the second most congested county, Santa Clara. In 2007, congestion for Alameda County increased by 8,900 vehicle hours of delay. This represents a 15 percent increase since the previous year. This continues the trend of increased congestion registered since 2003. In terms of total delay in Alameda County, I-80 (after accounting for congestion outside the County), accounts for 26% VHD, I-580 accounts for 20% VHD and I-880 accounts for 15% VHD.

Table 6—Total Weekday Delay on Freeways (in vehicle hours of delay)

YEAR	TOTAL HOURS	% CHANGE FROM PREVIOUS YEAR
1998	41,800	+18.1
1999	44,300	+ 6.0
2000	61,700	+39.3
2001	65,600	+6.3
2002	61,300	- 6.6
2003	46,300	-24.5
2004	50,500	+9
2005	52,300	+4
2006	55,000	+6%
2007	63,900	+15%

Source: MTC, (2004 - 2007 Congestion data) and Caltrans District 4, Highway Congestion Monitoring Data (1996-2003).

Note: Data was not collected in 1997.

Top 10 Congested Locations

Now new data was collected since 2007. The top 10 most congested corridors were reported in the previous Performance Report. This Report also adds vehicle hours of delay and duration of congestion from MTC's 2007 data.

2007 congestion data continues to show increased congestion compared to previous years. Table 7 shows the comparison of VHD for the top 10 locations for 2005, 2006, and 2007. There is an increase in daily congestion in the Top 10 by a total of 2,720 VHD, a rise of about 6% during the one-year period between 2006 and 2007.

Eight of the top 10 most congested locations in 2007, as shown in Appendix D, are retained by the same roadway segments as in 2006. Interstate 80 in the morning peak continues to retain its rank as the most congested corridor in Alameda County and the Bay Area Region. I-80 is holding three spots on the Top 10 list. I-580 continues to be the second most congested corridor in the county by holding 2nd and 3rd place in the top 10 congested locations in the County. The vehicle hours of delay on the eastbound I-580 in the afternoon increased by 10% in 2007. Of the Top-10 congested corridors in Alameda, congestion on I-80, accounts for 38% of VHD (this includes congestion outside Alameda County), I-580 accounts for 28% of VHD.

Of the Top 10 Congested locations, Eastbound SR-92 stayed in 4th place with a nominal increase in congestion (1 percent). Eastbound I-80 in the afternoon from McArthur maze to Albany, that made the list for the first time in 2006, dropped off the top 10 list in 2007. Similarly, northbound I-880 from West Grand Avenue to Maritime Street, which has been on and off the top 10 list of congested corridors over the past few years, dropped off the list in 2007.

Duration of Congestion in the Top 10

The Highway Congestion Monitoring also provides additional data on the duration of congestion for each freeway. Table 8 compares the duration of congestion for the Top 10 congested locations in Alameda County for the years 2005, 2006, and 2007. A decrease in vehicle hours of delay, without a geographic change in congestion, generally results in a decrease in the duration of congestion.

- On westbound I-580 in the morning, duration of congestion increased 1 hour and 15 minutes compared to 2006, and congestion began earlier in 2007 compared to 2006, i.e., instead of from 6:55 a.m. to 10:15 a.m., it shifted to 5:30 a.m. to 9:35 a.m.
- The largest increase in duration of congestion was on eastbound I-80 from Treasure Island to Powell Street in Emeryville in the afternoon peak period, which was congested for two hours and 20 minutes longer compared to 2006, a shift from nearly four hours to six hours 40 minutes.
- Of the eight segments that were on both the 2006 and 2007 Top 10 congestion lists, congestion duration increased for six segments and decreased for two segments.

Table 7—Vehicle Hours Delayed in Top 10 Congested Corridors in Alameda County								
	2005			2006			2007	
Rank	SEGMENT	PEAK	VHD	SEGMENT	PEAK	VHD	SEGMENT	PEAK VHD
1.	WB I-80:* SR-4 to Bay Bridge	a.m.	10,930	WB I-80:* SR-4 to Bay Bridge	a.m.	12,230	WB I-80:* SR-4 to Bay Bridge	a.m. 11,100
2.	EB I-580: I-680 to E/O El Charro	p.m.	6,100	EB I-580: I-680 to W/O El Charro	p.m.	6,720	EB I-580: I-680 to Greenville	p.m. 7,410
3.	WB I-580: N. Flynn Rd. to Airway	a.m.	5,830	WB I-580: W/O N.Flynn Rd. to W/O Airway	a.m.	5,320	WB I-580: I-205 to Hacienda	a.m 5,120
4.	EB SR-92: Clawitter to I-880	p.m.	3,880	EB SR-92: Clawitter to I-880	p.m.	3,880	EB SR-92: Industrial to I-880	p.m 3,930
5.	EB I-80*: Yerba Buena Island to Powell St	p.m.	3,120	EB I-80*: Bryant St/5th St to Sterling St. in SF and W/O Treasure Island to Powell St in Emeryville	p.m.	3,030	SB I-880 Marian Blvd to So. of Industrial	a.m 3,790
6.	WB I-80:* At Toll Plaza & Incline Section of SFOBB to Fifth St.	p.m.	2,800	WB I-80:* At Toll Plaza & Incline Section of SFOBB to Fifth St.	p.m.	2,760	EB I-80*: Bryant St/5th St to Sterling St. in SF and W/O Treasure Island to Powell St in Emeryville .	p.m. 3,530
7.	EB I-80: I-580 to N/O Gilman St.	p.m.	2,350	EB I-80: McArthur Maze to Albany	p.m.	2,470	NB I-880: Decoto to Alvarado-Niles & at Whipple & Industrial to Tennyson	p.m. 2,880
8.	EB SR-24: W/O 52nd St to Caldecott Tunnel	p.m.	1,890	NB I-880: W. Grand Ave. to Maritime St.	a.m.	2,440	WB I-80*: McArthur Maze to 5th Street, San Francisco	a.m. 2,480
9.	WB I-80: Gilman St. to I-580	p.m.	1,780	EB SR-24: E/O Telegraph to Caldecott Tunnel	p.m.	1,890	SB I-880 Thornton to Mission Blvd/262	p.m. 2,640
10.	NB I-880: W. Grand Ave. to Maritime St.	a.m.	1,750	SB I-880: N/O Fremont Blvd. to S/O SR 262	a.m.	1,920	EB SR 24: I-580 to Orinda	p.m. 2,500

Source: Caltrans Highway Congestion Monitoring Data (2002-2003). MTC (2004–2007)
Note: * indicates portion of the segment falls outside Alameda County.

Table 8—Duration of Congestion in Top 10 Congested Corridors in Alameda County

	2005			2006			2007		
RANK	SEGMENT	PEAK	TIME	SEGMENT	PEAK	TIME	SEGMENT	PEAK	TIME
1	WB I-80:* SR-4 to Bay Bridge	a.m.	05:45-10:15	WB I-80:* SR-4 to Bay Bridge	a.m.	05:20-09:40	WB I-80:* SR-4 to Bay Bridge	a.m.	05:50-09:40
2	EB I-580: I-680 to E/O El Charro	p.m.	02:50-07:35	EB I-580: I-680 to W/O El Charro	p.m.	03:05-07:20	EB I-580: I-680 to Greenville	p.m.	02:50-07:30
3	WB I-580: N. Flynn Rd. to Airway	a.m.	05:55-09:20	WB I-580: W/O N.Flynn Rd. to W/O Airway	a.m.	06:55-10:15	WB I-580: I-205 to Hacienda	a.m.	05:30-09:35
4	EB SR-92: Clawitter to I-880	p.m.	03:05-07:20	EB SR-92: Clawitter to I-880	p.m.	03:05-07:20	EB SR-92: Industrial to I-80	p.m.	03:15-06:50
5	EB I-80*: Yerba Buena Island to Powell St	p.m.	03:05-07:10	EB I-80*: Bryant St/5th St to Sterling St. in SF and W/O Treasure Island to Powell	p.m.	03:20-07:10	SB I-880*: Marian Blvd to So. of Industrial Emeryville	a.m.	06:35-9:35
6	WB I-80:* At Toll Plaza & Incline Section of SFOBB to Fifth St.	p.m.	04:00-07:10	WB I-80:* At Toll Plaza & Incline Section of SFOBB to Fifth St.	p.m.	03:45-07:10	WB I-80:* Bryant St/5th St to Sterling St. in SF and W/O Treasure Island to Powell	p.m.	1:40-8:20
7	EB I-80: I-580 to N/O Gilman St.	p.m.	02:45-06:25	EB I-80: McArthur Maze to Albany	p.m.	02:45-06:25	NB I-880: Decoto to Alvarado-Niles & at Whipple & Industrial to Tennyson	p.m.	02:35-7:05
8	EB SR-24: W/O 52nd St to Caldecott Tunnel	p.m.	03:50-07:00	NB I-880: W. Grand Ave. to Maritime St.	a.m.	06:05-10:20	EB I-80: McArthur Maze to Albany .	p.m.	02:35-7:05
9	WB I-80: Gilman St. to I-580	p.m.	02:40-06:15	EB SR-24: E/O Telegraph to Caldecott Tunnel	p.m.	03:30-07-10	SB I-880: Thornton to Mission Blvd/262	a.m.	06:16-10:15
10	NB I-880: W. Grand Ave. to Maritime St.	a.m.	06:00-08:55	SB I-880: N/O Fremont Blvd. to S/O SR 262	a.m.	06:15-09:35	EB SR 24: I-580 to Orinda	a.m.	04:00-06:45

Source: Caltrans Highway Congestion Monitoring Data (2001-2003). MTC -(2004 - 2007)
Note: * indicates portion of the segment falls outside Alameda County.

ROAD MAINTENANCE

Local Jurisdictions

MTC monitors the pavement condition of local streets by weighting the average Pavement Condition Index (PCI) for the general pavement condition within defined networks. In Alameda County, they weight the pavement condition for the entire County and each city within the County. The PCI is weighted on a scale of 0 to 100, with the highest rating being new pavement, with a PCI of 100.

PCI Categories

MTC rates PCI by classification from excellent to poor, as indicated in Table 9. They use this system to track the percentage of centerline miles within each roadway type in each jurisdiction.

Table 9—Rating of Pavement Condition

CLASSIFICATION	PCI RANGE
Excellent Condition	PCI of 90-100
Very Good Condition	PCI of 75-89
Good Condition	PCI of 60-74
Fair Condition	PCI of 45-59
Poor Condition	PCI of 25-44
Very Poor Condition	PCI below 25

Source: MTC, Pavement Management System

PCI Categories in Alameda County

Table 10 shows the percentage of centerline miles for all roadway types in each of the classification categories. Roadway types include MTS and non-MTS, including arterials, collectors, and residential. Approximately 76 percent of all the roadways were reported to be in fair to excellent condition in Alameda County in 2007-08. Pavement in very poor to very poor condition represents about 17 percent of the County's roadways, which indicates a six percent increase since the previous year.

Table 10—Pavement Condition in Local Alameda County Jurisdictions
Measured by percentage of total pavement condition

CATEGORY	1996	2003	2004[2]	2005[3]	2006[4]	2007
Excellent Condition	NA	18	21	12	12	7
Very Good Condition	NA	31	34	35	37	25
Good Condition	54	16	18	21	20	21
Fair Condition	25.9	13	13	16	14	23[5]
Poor Condition	15.1	11	7	11	11	15
Very Poor Condition	5	5	2	5	6	8[6]

Source: MTC, Pavement Management System.

Notes:

1. Not all jurisdictions reported data for all years.
2. In 2004-05, there was no data for 4% of the roadways monitored.
3. In 2005, MTC switched to calculating PCI based on lane miles, rather than centerline miles, which had been used since 2002.
4. In 2006, the City of Oakland changed the way they reported PCI.
5 Fair condition includes a new "at risk" category in 2007.
6. Very poor condition indicates "failed" in 2007.

Pavement Condition Index (PCI) in Alameda County

MTC reported that the average PCI for Alameda County roadways for 2007-08 was 65. This rating is four percentage points better than pavement conditions reported last year. The average Alameda County PCI represents pavement conditions throughout 15 jurisdictions, which range from a seven percent decline to a six percent improvement in pavement conditions. Appendix E in the Performance Report shows PCI by jurisdiction.

State Facilities

Caltrans is responsible for maintaining the freeways and state highway system. Under the state system, assessment of pavement condition differs from the Pavement Condition Index. Since 1978, the types of ride (i.e., rough ride) and structural problems have been monitored in the State. The combination of these two factors is the initial step in determining if a segment should be scheduled for improvement.

As required by SB 45, Caltrans has prepared a 10-year plan for maintenance of state highways and freeways. The plan identifies roads in need of rehabilitation and a schedule for completing the work. The goals of the program are to:

- Reduce the lane mile backlog of pavement in poor condition,;
- Switch from a "worst-first" to "preventive maintenance" strategy;
- Use long life pavement strategies; and
- Integrate maintenance and rehabilitation work.

The 2007 survey of State facilities showed that 154 lane-miles of freeway and 78 lane-miles of state facilities were in need of rehabilitation. Both total state and freeway facility lane-miles in need of rehabilitation decreased since 2005. SR-84 shows the most increase in the lane miles in need of rehabilitation with a 38% increase from the previous year. The number of lane miles in need of rehabilitation by route in Alameda County is shown in Table 11.

Table 11—State Facility Lane Miles in Need of Rehabilitation in Alameda County

INTERSTATE AND STATE HIGHWAY	LANE MILES			OTHER STATE ROUTES	LANE MILES		
	2004	2005	2007		2004	2005	2007
Highway 13	15.3	15.3	9.6	SR-61	7.3	1.5	1.4
Highway 24	6.5	3.8	0.4	SR-77	1.4	1.4	1.3
Interstate 80	0	1.9	5.3	SR-84	11.5	12.0	16.6
Interstate 205	0.8	0.9	0.9	SR-92	6.2	5.6	7.1
Interstate 238	5.6	0.1	2.0	SR-112	7.1	6.7	5.0
Interstate 580	95.0	142.7	88.5	SR-123	17.6	3.9	0.0
Interstate 680	62.5	70.1	36.7	SR-185	23.5	24.7	22.4
Interstate 880	13.5	21.7	9.1	SR-238	12.8	29.6	20.8
Interstate 980	0.4	0.4	1.2	SR-260	1.9	2.0	1.6
				SR-262	1.1	3.21	1.5
TOTAL	**199.6**	**256.8**	**153.7**		**90.4**	**90.6**	**77.7**

Source: Caltrans, District 4

ACCIDENT RATES

Table 12 shows total accidents on Alameda County freeways in 2007 compared to previous years and compared to the same year for similar facilities outside of Alameda County. Similar facilities are those Caltrans distinguishes based on the type and location of the route, number of lanes and volume of traffic. Accident rates on Alameda County freeways have generally **[pending update from Caltrans District 4]**.

Table 12—Accident Data for State Freeways in Alameda County

FREEWAY	ROUTE LENGTH	TOTAL NUMBER OF ACCIDENTS						ACCIDENTS/MILLION VEHICLE MILES*						2006 STATE AVERAGE FOR SIMILAR FACILITY***
		1998	2002	2003	2004	2005	2006	1998	2002	2003	2004	2005	2006	
SR-13**	5.70	149	108	117	129	121	108	1.43	0.93	1.01	1.08	0.98	0.93	1.60
SR-24	4.40	274	322	264	357	401	307	1.29	1.43	1.17	1.54	1.71	1.38	0.92
I-80**	9.29	1252	1224	1175	1244	1359	1258	2.61	2.23	2.14	2.06	1.68	1.70	1.05
SR-84**	6.01	118	93	106	85	143	132	1.82	1.22	1.39	1.06	0.86	0.91	1.47
SR-92**	6.42	207	210	196	217	225	194	1.63	1.62	1.51	1.62	1.31	0.84	1.47
I-238**	2.53	137	143	141	160	191	168	1.98	2.05	2.02	2.08	1.98	1.63	2.26
I-580	54.16	2296	2488	2378	2536	2687	2543	0.87	0.89	0.85	0.88	0.84	0.79	0.87
I-680	21.48	698	669	544	549	551	592	0.75	0.66	0.54	0.49	0.49	0.52	1.04
I-880**	37.07	3185	3565	3335	3244	3216	2934	0.98	1.40	1.31	1.24	1.24	1.12	1.05
I-980	2.03	129	71	47	49	79	73	0.95	0.92	0.61	0.63	1.20	1.21	0.75

Source: Caltrans, District 4 * - Rate based on number of fatal and injury accidents per million vehicle miles.
**- Caltrans indicated that the actual lengths of these freeways within Alameda County are longer than what has been reported until 2004. Correct length is shown now. The accident rates on SR-84 and SR-92 for the year 2005 were corrected by Caltrans in this Performance Report.
***Accident rate on a similar facility is the average accident rate on state route within the same rate group which is defined by Caltrans based on the type and location of the route, number of lanes and volume of traffic.